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Be Clear on Cancer: Pharmacy students' views of communicating with cancer patients

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Abstract

Background: The role of the pharmacist is changing. One example of this is the potential for pharmacists in primary care to be involved in the administration and monitoring of cancer patients receiving oral chemotherapy. However, little is known about whether pharmacists feel they have sufficient communication skills training to conduct consultations with cancer patients.

Aims: To ascertain undergraduate pharmacy students' attitudes towards developing the communication skills required to conduct consultations with cancer patients in pharmacy practice.

Methods: Qualitative and quantitative methods were used for the study. A questionnaire focusing on the communication skills required to care for cancer patients was administered to all four year groups of an undergraduate pharmacy degree at a United Kingdom School of Pharmacy. Key emerging issues were then explored through a focus group, which were analysed using a thematic content analysis.

Results: Several themes emerged from the qualitative data in relation to communicating with cancer patients, including concern about speaking to patients with cancer.

Conclusions: Pharmacy students perceived cancer patients as being a unique patient group creating anxieties over communication. Final year pharmacy students perceive context-based learning as the most effective means of acquiring communication skills required to talk to cancer patients.

Keywords: *Communication, Cancer, Pharmacy, Context-based learning*

Introduction

Worldwide, the role of the professional pharmacist is changing. Recent years have witnessed a transition from the traditional model of compounding and dispensing medication to a more clinical, patient-focused role. Thus, pharmacists are now involved in a variety of pharmaceutical care interventions, including clinical decision-making.

Acknowledging the developments of the changing role of the pharmacist, the World Health Organisation (WHO) has introduced the concept of the 'seven star pharmacist': seven roles that the pharmacist may be expected to take on (WHO, 2006). These include: caregiver, decision-maker, communicator, manager, lifelong learner, teacher and leader. In order to prepare an adequate number of well-trained pharmacists for such roles the WHO has called for 'a coordinated and multifaceted effort to advance workforce planning, training and education' (Anderson *et al.*, 2009). As

a result, many Schools of Pharmacy have increased the clinical content of their pharmacy programmes. However, other skills, such as good communication, are also required to provide effective pharmaceutical care to patients and, at present, pharmacists develop these skills ad hoc post-graduation.

One recent example of the changing role where it has been proposed that United Kingdom (U.K.) pharmacists in primary care should be involved in the administration and monitoring of patients receiving oral chemotherapy and systemic anticancer therapies (RPS, 2011). This proposal is timely as, in recent years, many new orally active agents – both targeted therapies and traditional chemotherapy – have been developed and licensed for the treatment of various cancers. Examples include erlotinib for the second-line treatment of non-small cell lung cancer and capecitabine – an oral pro-drug of 5-fluorouracil – for the adjuvant treatment of colorectal cancer. These recent developments represent a

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move away from delivering chemotherapy via the traditional intravenous route to a more patient-acceptable, oral route (Liu, 1997).

When working with cancer patients, good communication skills are considered a core clinical ability and are essential for good cancer care (Fallowfield & Jenkins, 1999). For example, a recent study investigating antiemetic control in breast cancer patients concluded that, to improve antiemetic control, effective communication between healthcare professional and patient was essential (Shih *et al.*, 2009). Consequently, research on communication between patient and healthcare professional is a rapidly growing area and, as a result, it is often difficult to acquire a coherent picture of current knowledge. To help overcome this issue, conceptual frameworks are widely used in educational research to help 'illuminate and magnify' a problem or study (Bordage, 2009). Indeed, there are many conceptual frameworks related to communication and, more specifically, communication in terms of healthcare (Ong *et al.*, 1995). In terms of specifically communicating with cancer patients, Feldman-Stewart and colleagues have designed a conceptual framework of patient-professional communication within the healthcare setting and applied it to a cancer context (Feldman-Stewart *et al.*, 2005). This framework is intended as a tool for organising and summarising relevant research, but can also help guide or develop the communication process.

In view of the proposal for pharmacists to supply oral chemotherapy and systemic anticancer therapies in primary care, the following study was conducted to ascertain the perceptions of undergraduate pharmacy students towards developing the communication skills required to deal effectively with cancer patients. To frame our work in the current literature, a conceptual framework with specific application to a cancer context was used.

Methods

Mixed methods were used in this study. A questionnaire was developed through informal discussions with pharmacy students during seminars across all four year groups at a U.K. School of Pharmacy. Questions centred on the communication skills required to deal with cancer patients and the context in which such skills should be acquired.

Questionnaire responses were in the form of a tick box. For the first question, which asked students whether there was a need for advanced communication skills when conducting consultations with cancer patients in pharmacy practice, students were asked to choose either 'yes' or 'no', while for the second question, relating to the context of acquiring advanced communication skills, students could choose either 'as part of an undergraduate degree' or 'as part of on-going postgraduate professional development'.

Questionnaires were administered by the researcher in the same teaching week at the beginning of a seminar class for all four year groups. Any student who was absent during the week of data collection was not followed up. This ensured a standardised context and a high response rate. Data were then analysed using logistic regression (LR).

Key issues arising from the analysis of the questionnaire were explored through a focus group conducted by the same

researcher (IS). This consisted of 12 students with three purposively sampled from each year group. All students gave informed, verbal consent to take part in the group discussion. The focus group data were digitally recorded and transcribed verbatim. Typed transcripts were then reviewed by the primary researcher (IS) to check that meaning had not been lost in the transcription process.

The data were then analysed using a thematic approach consisting of the following stages: familiarisation with the data by re-reading of the transcripts, generating initial codes, searching for themes, reviewing themes, defining themes and reporting themes (Braun & V. Clarke, 2006). This process was led by the primary researcher (IS), but was reviewed with the principal investigator (AT) who read transcripts, discussed and confirmed coding and interpretation.

This study was certified for ethical approval by the principal investigator in accordance with the University of Sunderland Ethics Committee.

Results

In total, 693 students were given the questionnaire and 598 responses were received (86%) as described in Table I. The remainder of the questionnaires were not returned.

Table I: The number of respondents according to year group

Year Group	No. of responses	Percentage response rate
Year 1	152/184	83 %
Year 2	174/207	84 %
Year 3	162/171	95 %
Year 4	110/131	84 %
Total	598/693	86 %

Two key findings from the questionnaire were observed. Firstly, virtually all students (mean: 99%) believed that advanced communication skills were required when conducting consultations with cancer patients in pharmacy practice. Secondly, beliefs regarding the best means of acquiring such communication skills differed between year groups (LR $\chi^2 = 14.798$, $p < 0.01$). The majority of students in Year 1 (65%), Year 2 (61%) and Year 3 (62%) believed that communication skills were best delivered as part of the undergraduate degree, while, for Year 4 students, this percentage was significantly lower (43%). The majority of Year 4 students (57%) believed such skills should be acquired as part of on-going professional development in a clinical setting, after graduation. These two findings were explored in a focus group using three open-ended questions.

- How do you feel about talking to patients with cancer?
- Are all patients the same?
- How have you developed your communication skills?

Two major themes subsequently emerged from the focus group. The first theme was that pharmacy students across all year groups thought, in terms of communication, not all patients are the same – with some patient groups requiring more advanced communication skills to talk to than others. Students also perceived that the degree of communication skills required for effective consultations was related to the patients' medical disorder. In particular, all students perceived cancer patients to be different from other patients, which created greater anxieties over communication with this patient group.

"A patient with cancer may be highly distressed and difficult to talk to. I would be unable to empathize with them as it would be an unfamiliar situation – it would be easier to talk to someone with hypertension or something like that". Year 3 pharmacy student

In particular, students were concerned about the potential impact of their communications with cancer patients, with several participants referring to concerns about the potential for misunderstandings.

"Certain patients with certain conditions will be easier to talk to. With cancer patients, for example, the answer is not always straightforward. I would be scared of upsetting or offending them; you wouldn't want to give them false hope". Year 4 pharmacy student

The second theme that emerged was Year 4 pharmacy students believed that to develop such communication skills, training needs to be context-, not classroom-based.

"Until you have done it [communicated with a cancer patient] I don't think you can pick it up. You can't learn that in a classroom". Year 4 pharmacy student

Students from other year groups thought communication skills could be successfully acquired in a classroom. Furthermore, students from years 1-3 wanted to use role-play scenarios with other students (around talking to cancer patients) where they could get feedback from the tutor. Students from years 1-3 appeared to perceive that rapid feedback is an important aspect of classroom teaching and significantly helps to improve performance and, ultimately, confidence around developing the communication skills that are required to conduct consultations with cancer patients.

"I would want to practice with my friends [on how to talk to a cancer patient] and the teacher could give me feedback on where I went wrong". Year 1 pharmacy student

To frame our finding in a conceptual framework, we used the patient-professional communication framework developed by Feldman-Stewart and colleagues (Feldman-Stewart *et al.*, 2005). This framework, which was specifically designed for the cancer context, has four key components: the first, is a focus on the interaction, which examines each participants communication goals; the second, consists of participants, each with five key attributes (namely, needs, skills, values, benefits and emotions); the third, communication process itself that can be verbal, non-verbal and silent; and the fourth, the environment in which the communication process takes place.

Examining these findings in terms of the first component of Feldman-Stewart *et al.*'s conceptual framework – the

participants' goals – suggests that pharmacy students are relatively confident talking to cancer patients about their medicines (*i.e.* achieving their own goals during the consultation), but are not confident in dealing with questions posed by cancer patients in relation to their illness (*i.e.* dealing with patients goals during the consultation). For example, a cancer patient may have a primary goal of obtaining information about their prognosis during a consultation (Hagerty *et al.*, 2004). During the focus group, students were concerned about '*upsetting patients*' or '*giving them false hope*' suggesting they were anxious to answer questions in relation to a patients cancer, which is often a primary goal for the patient during a consultation.

In relation to the second component of the framework – the participants themselves – the Year 4 students acknowledged the importance of emotions and, in particular, the need for empathy. For example, one stated '*I would be unable to empathize with them as it would be an unfamiliar situation*' while another commented that '*reading a scenario [for communicating with a cancer patient] in a classroom doesn't really evoke the emotions*'. The Year 4 students thought this aspect of communication skills could only be developed through context-based learning.

Interestingly, none of the students acknowledged or discussed the third component of the framework, which is the actual communication process itself. For communicating with cancer patients, verbal, non-verbal and silent forms of communication are all considered important aspects of communication.

The final component of the framework is the environment in which the communication takes place. Year 4 pharmacy students acknowledged the importance of this, wanting additional context-based learning to experience the environment in which a consultation with a cancer patient takes place. For example, one Year 4 student claimed that '*you can't learn that in a classroom*' suggesting that the environment is not just important for delivering consultations, but is also important factor when developing communication skills.

Discussion

We found that increased context-based learning, similar to that currently received by medical and nursing students, is perceived by Year 4 pharmacy students as an effective means of acquiring the communication skills required for conducting consultations with cancer patients in pharmacy practice. This is in agreement with the current literature around developing communication skills through context-based learning in clinical settings; for example, a recent paper by Turan and colleagues describes a communication skills training programme, developed for medical students, that successfully uses clinical visits to supplement class room teaching (Turan *et al.*, 2009). Further, Petrie, in the United States successfully placed Year 4 pharmacy students within a Level II trauma centre team to improve patient care and communication skills (Petrie, 2011).

In our results, the Year 4 pharmacy students did not specifically state what kind of additional context-based learning they required. Indeed, when introducing students to context-based learning care should be taken; such learning

should be structured and allow students to acquire confidence and a sense of professional identity (Dornan *et al.*, 2007). Learning should be challenging, but not harm a student's confidence, as this would be counterproductive. To achieve this there are generally four levels of participation for the student: passive observer, active observer, actor in rehearsal and actor in performance as outlined in a model of experienced-based learning (Dornan *et al.*, 2009). These levels of participation should vary according to the level student and the complexity of the case. Our findings showed pharmacy students in years 1-3 would rather practice on other students in a simulated, classroom environment, they may be more suited to being passive observers (initially at least, to build confidence) when a healthcare professional is communicating with a cancer patient, while students in Year 4 may participate in a more active way (such as an actor observer).

Another finding of this study is that pharmacy students are anxious about communicating with cancer patients and perceive them as being different from other patient groups. To our knowledge, the fact students perceive cancer patients to be different from other patient groups has not been reported in the literature and this perceived difference might prove to be a future barrier to pharmacists in conducting effective consultations with cancer patients and would warrant further investigation.

As cancer is a complex disease – with many available therapeutic interventions – it is traditionally delivered in the final year of study. The students that were surveyed in Year 4 had just undertaken a module relating to cancer therapeutics, while students in years 1-3 had no prior knowledge of this subject area. Therefore, once the students gain knowledge on cancer, they report a need for additional context-based learning in relation to developing communication skills. If material related to cancer was delivered earlier in the pharmacy programme it is not clear if the students in earlier years would also want additional context-based learning; this warrants further investigation.

The finding that final year pharmacy students perceive context-based learning as a more effective means of acquiring communication skills is timely as, in the U.K., Medical Education England (MEE), through the modernising pharmacy careers (MPC) programme commissioned a review of the existing model of pharmacist formation (Medical Education England, 2011). The review proposed that rather than have a separate pre-registration (internship) year to qualify as a pharmacist – current practice in the U.K. – that the undergraduate pharmacy degree should be combined with the pre-registration year, producing a single integrated five-year degree, allowing for more context-based learning. Our findings lend support to this proposal. At present, however, in the U.K., pharmacy is funded as a science degree, and therefore does not receive additional funding for placement teaching, clinical visits and small-group skills teaching. This current funding situation severely restricts the ability of schools of pharmacy to provide these important opportunities for context-based learning in a secure, consistent and sustainable way.

We examined our findings in the context of Feldman-Stewart's conceptual framework for patient-professional communication. This framework has helped to highlight areas of concern for pharmacy students, such as dealing with the

concerns of patients, in particular feeling that their training may not equip them for the emotional issues related to communicating with patients who have cancer. Concerns about communication are important, for example remaining silent and allowing patients to digest information and ask questions are important facets of the communication process – especially when breaking bad news to cancer patients. (Maguire, 1999). However, as these factors were not discussed, it is possible that pharmacy students do not perceive these facets as valuable when talking to cancer patients, although this is an issue that warrants further investigation. The conceptual framework also has a focus on pairs of interactions, future research should move to focus more on shared decision making between the pharmacist and the patient.

We acknowledge that this study has limitations, as only students from one School of Pharmacy were included. Generalisation of this work to all pharmacy students in U.K. and more widely should therefore be made carefully. Nonetheless, we believe that the issues raised by the pharmacy students have clear implications for future practice both in terms of teaching and continuous professional development.

Conclusion

In summary, pharmacy students perceive cancer patients as being different to other patients, creating greater anxieties over communication with this patient group. As a result, pharmacy students believe that advanced communication skills are required to conduct consultations with cancer patients in pharmacy practice. Year 4 pharmacy students perceive context-based communication skills training as most effective, while students in years 1-3 believe these skills can be developed in a classroom environment. Any additional context-based learning offered to pharmacy students should be structured and organised in such a way to allow the student to increase their confidence and also develop a sense of professional identity.

For pharmacists to fulfill their expanding clinical role – particularly in relation to cancer – it is essential that they have training that equips them with the necessary skills to communicate effectively with patients.

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